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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,990	12/31/2001	Ching-Chuan Chao	MR3029-8	6190

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EXAMINER	
LIANG, REGINA	
ART UNIT	**PAPER NUMBER**
2674	2

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/029,990	CHAO ET AL.	
	Examiner	Art Unit	
	Regina Liang	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *30-34* is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. The claims 1 and 19 are objected under 37 CFR 1.75.

Although applicants' claims 1 and 19 meet the requirement of 112/2nd, i.e. the metes and bounds are determinable, the spelling could be improved. Examples are "andsaid" should be changed to –and said--. It is in the best interest of the patent community that applicant, in his/her normal review and/or rewriting of the claims, to take into consideration these editorial situations and make changes as necessary.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kannan et al (US. PAT. NO. 5,329,625 hereinafter Kannan).

As to claim 1-3, Figs. 1, 2 of Kannan discloses a computer peripheral input system with two input types, comprising a keyboard device (20) for inputting a first input data and generating a first input signal, a digitizer tablet device (14, 18) for inputting a second input data and generating a second input data, a control means (Fig. 2) having communication interface (service processor 24) installed therein and serving for reading and processing the first input signal and the second input signal, and storing a first and second information represents the fist input data and the second information represents the second input data, and the communication interface

serving for sending the first information and the second information stored in the control means to a computer host (130) by a polling method (col. 4, line 33 to col. 6, line 25 for example).

As to claim 4, Kannan teaches the digitizer tablet device comprising a digitizer tablet and a plurality of pointing devices.

As to claim 14, Kannan teaches the control means comprising a micro-controller.

As to claims 15, 16, Kannan teaches the communication interface comprising a USB interface which has an endpoint 0 and an endpoint 1 (col. 5, line 65 to col. 7, line 25).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 5, 6, 8, 9, 12, 19-22, 25, 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kannan in view of Abernethy (US. PAT. NO. 5,525,981).

As to claims 6, 19, Kannan discloses the second input signal (digitizer tablet device) having a second digital signal, and the second digital signal is processed to a coordinative data corresponding to the second input data by the control means. Kannan does not disclose the second input signal having a first digital signal, and the first digital signal is processed to a pressure data or a button status data. However, Abernethy teaches a digitizer tablet device generating a pressure data or a button status data. Thus it would have been obvious to one of

ordinary skill in the art at the time the invention was made to modify the second input signal of Kannan to have a first digital signal (pressure or button signal) as taught by Abernethy so as to provide a digitizer tablet device generating pressure/button information signals such as buttons pushed, pen pressure, or the like.

As to claims 5, 20, 21, Abernethy teaches the pointing devices comprising a cordless pen, a puck. Kannan as modified by Abernethy does not disclose the pointing devices comprising a cordless mouse. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the pointing devices of Kannan as modified by Abernethy to have a coreless mouse so as to provide additional input devices to input position information.

As to claims 8, 12, 22, Fig. 2 of Abernethy teaches the processing unit comprising pressure signal waveform generation circuits for generating the first digital signal (button press signal). Col. 3, lines 1-21 of Kannan teaches the processing unit comprising position signal waveform generation circuits and an analog to digital convert circuit for generating the second digital signal (coordinate position signal).

As to claims 9, 25, Fig. 1 of Abernethy teaches a counter (7) for determining a frequency of the first digital signal (pressure or button signal).

As to claim 27, Kannan teaches the control means comprising a micro-controller.

As to claims 28, 29, Kannan teaches the communication interface comprising a USB interface which has an endpoint 0 and an endpoint 1 (col. 5, line 65 to col. 7, line 25).

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kannan and Abernethy as applied to claim 6 above, and further in view of Cheng et al (US. PAT. NO. 5,365,253 hereinafter Cheng).

Kannan as modified by Abernethy does not disclose the processing unit comprises amplifier and filter circuits for amplifying the second input signal (digitizer tablet signal) and eliminating noises. However, Cheng teaches a digitizer tablet device having a processing unit comprising amplifier and filter circuits (10, 12) for amplifying digitizer tablet signal and eliminating noises. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the processing unit of Kannan as modified by Abernethy to have amplifier and filter circuits as taught by Cheng to eliminate outside noises so as to prevent a misuse.

7. Claims 10, 11, 23, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kannan and Abernethy as applied to claims 6 and 19 above, and further in view of Mletzko (US. PAT. NO. 4,992,630).

As to claims 10, 23, Kannan as modified by Abernethy does not disclose the pressure signal waveform generation circuits comprising a comparator circuit. However, Fig. 4 of Mletzko teaches a pressure signal waveform generation circuits comprising a comparator circuit (32). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the pressure signal waveform generation circuits of Kannan as modified by Abernethy to include a comparator circuit as taught by Mletzko so as to provide a low-cost tablet for varying the stylus proximity and pressure threshold levels for operation by the tablet user.

As to claims 11, 24, Abernethy teaches the first digital signal is a clock signal (9).

8. Claims 13, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kannan and Abernethy as applied to claims 6, 19 above, and further in view of Chao et al (US. PAT. NO. 6,180,894 hereinafter Chao).

Kannan as modified by Abernethy does not disclose the position signal waveform generation circuits comprising a rectifier circuit and a peak detector circuit. However, Fig. 2 of Chao teaches a position waveform generation circuits comprising a rectifier peak detector circuits (206). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the position signal waveform generation circuits of Kannan as modified by Abernethy comprising a rectifier circuit and a peak detector circuit as taught by Chao so as to provide a digitizer tablet system can increase operation accuracy.

9. Claims 17, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kannan in view of Niedzwiecki (US. PAT. NO. 5,896,125).

As to claim 17, Kannan does not disclose a keyboard light emitting diode indicator. However, Niedzwiecki teaches a keyboard device comprising a LED indicator (24). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the keyboard device of Kannan to have a LED indicator as taught by Niedzwiecki to provide an illuminated indication at various stages of operation.

As to claim 18, Kannan as modified by Niedzwiecki does not disclose a tablet LED indicator. However, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Kannan as modified by Niedzwiecki to have a tablet LED indicator in the same manner as the keyboard indicator such that illuminated indication showing which input device is in use and the various stages of operation is made aware to the user.

Allowable Subject Matter

10. Claims 30-34 are allowed.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Martin et al (US.PAT. NO. 5,148,155) teaches a computer with tablet input to standard programs.

Fong (US. PAT. NO. 5,719,597) teaches an apparatus for scanning user input devices.

Hamilton, II et al (US. PAT. NO. 6,557,050) teaches a display computer with on-screen identifiers for multiple serial ports for avoiding physical mislabeling of ports.

Smith et al (US. PAT. NO. 5,111,005) teaches a graphics tablet with N-dimensional capability.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (703) 305-4719. The examiner can normally be reached on Monday-Friday from 9AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

REGINA LIANG
PRIMARY EXAMINER
ART UNIT 2674

RL
9/25/03